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NOTES

ON THE

265
TREATMENT OF CHRONIC
SKIN DISEASES,

WITH A

REPORT OF 1,300 CASES TREATED AT THE
SKIN HOSPITAL, HYDE ROAD,
MANCHESTER.

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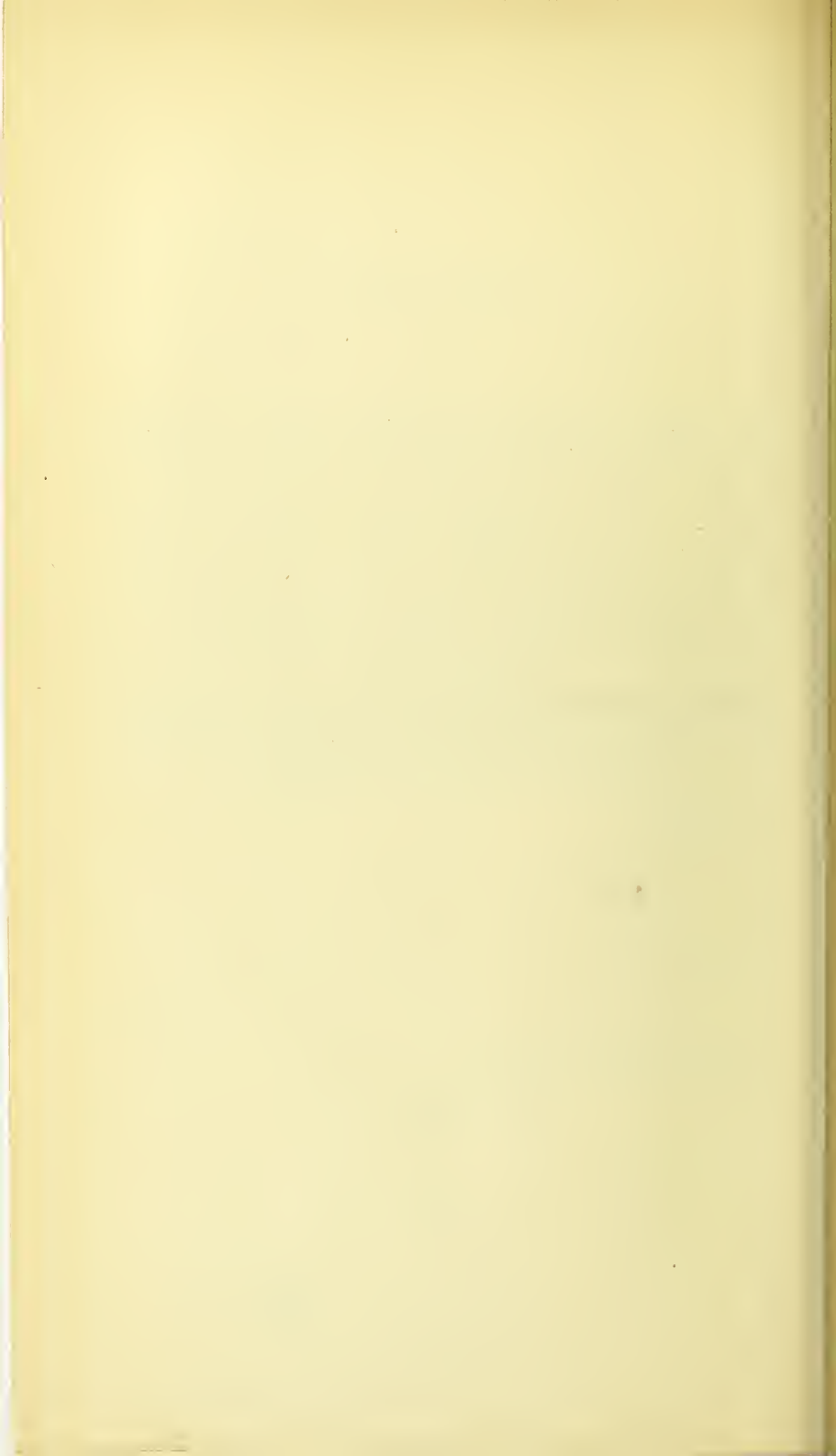
NOTES ON THE TREATMENT OF CHRONIC
DISEASES BY ELECTRICITY.

P R E F A C E.

IN writing this little pamphlet I fear I may have availed myself unconsciously of the writings of others. It is impossible, even if it were desirable, to name everyone from whom an idea has been obtained; and the writings of such men as Althaus, Reynolds, Remak, Ziemssen, and Duchénne are too well known to need any acknowledgment from me.

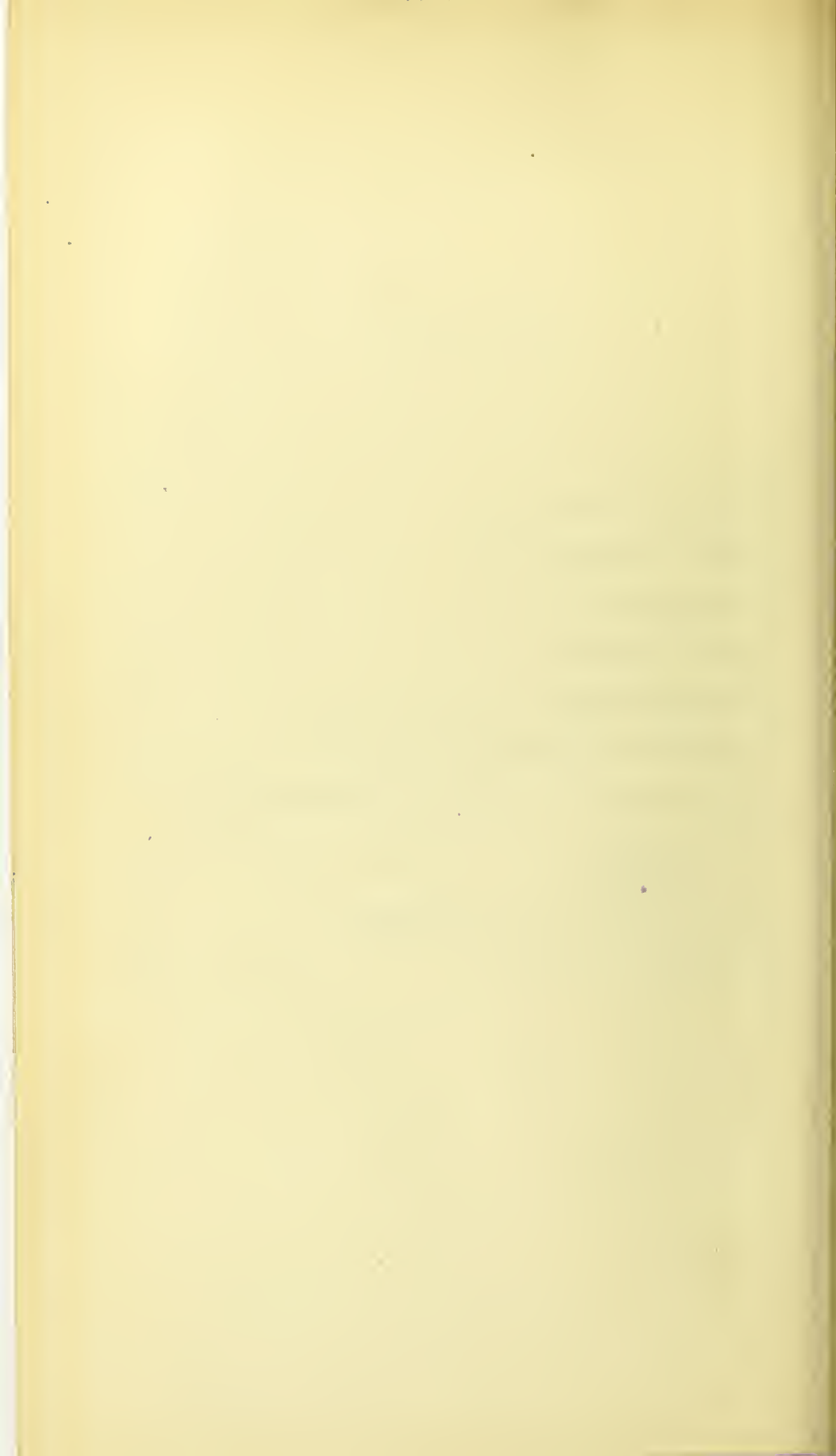
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NOTES.

DISEASES of the Skin are but little understood by medical practitioners in general, and even those who do know something about them often find the greatest difficulty in curing them. Anything which will help towards the attainment of this desirable end should therefore be warmly welcomed.

Within the last few years Electricity as a remedial agent in disease has made rapid strides in the favour of both the public and of the medical profession. I am not aware, however, that its use has been advocated in the treatment of cutaneous diseases. It certainly has not with anything like the frequency which its importance merits.

Most medical men have had to contend against obstinate chronic skin diseases with a very limited stock of remedies, and not a few have given up the struggle in despair. Others, again, have gone on trying one remedy after another, hoping that—to paraphrase the poet—

“Some stray shaft at random sent,
Might hit the mark the archer meant.”

In spite of everything, however, we see hundreds and hundreds of persons afflicted with Skin Diseases

in our streets and in the out-patient rooms of our hospitals, who have taken medicine for months without avail. Most of these, I believe, can be cured.

In the following remarks I hope to convince my readers that we have at command a power which by itself will cure many cases; and in conjunction with other remedies, will leave very few, if any, uncured.

When it does not cure by itself, it so modifies the nutritive actions taking place in the skin as to render it more amenable to ordinary remedies. The only wonder to me is that medical men have not more largely availed themselves of this means of cure in their general practice.

It cannot be expected that in a short pamphlet like this I can enter largely into either the physiological or the pathological aspect of the question.

My great object is to lay the matter before the profession, so that those who have it in their power may work with me and obtain additional facts.

ELECTRICITY has long been utilised by the more advanced practitioners of the day in the treatment of paralysis, neuralgia, dyspepsia, the removal of tumours, and countless other complaints. I regard this remedy as the most powerful of all we possess, both for good and evil. I have practised it a long time, and hold it to be a remedy *sans pareil*.

I need only remind members of my own profession that many years ago Mr. Spencer Wells advocated the use of galvanic action in the treatment of chronic ulcerated legs. Yet so conservative is our profession

in some things, that I doubt if one surgeon out of a hundred ever even tried to heal a bad leg by this means. No doubt they would say—"Why should we trouble ourselves about galvanism when we have other remedies, and can do without it?" I reply that there are, literally, swarms of poor people with bad legs who have attended at all the hospitals and dispensaries without benefit, and it is for such as these that a special hospital is most useful. Some little time can be devoted to their examination, and special means adapted to the case can be applied.

KIND OF ELECTRICITY REQUIRED.

The form of electricity required for these cases is neither that of the electrical machine, the induction coil, nor the electro-magnetic machine. The last two are in the hands of most well-informed practitioners for use in their general practice. I do not wish it to be understood that they are useless in the treatment of Skin Diseases; but as I am limited to a small space, I mention that which I think the more important.

We require a battery which produces a "constant" current. By "constant" I mean one which will not be subject to considerable variation within one or two months. I must remind some of my readers that a "continuous" current is not necessarily "constant." It must be one, too, which will produce a large *quantity* of electricity of low *tension*. If the quantity of electricity, however, is *too* great, the physiological effects produced may be modified either by chemical action or by the caloric produced.

It must be remembered that it is the tension of a current which is more influential than its quantity in modifying physiological results, and to variations in this that we apply the terms "strong" and "weak." It is, however, the chemical action of the battery which we chiefly want, and hence "quantity" is our desideratum. The battery used must be portable and free from acid vapour.

There is much confusion created by the different names given by various authors to the currents produced by different instruments. Thus we read of a primary current, secondary current, initial current, extra current, induced current of the first order, induced current of the second order, and so on. In studying electricity applied to medicine generally, we must know something of all these. For our present purpose we need only consider the ordinary current, which travels from the negative metal through the wire to the positive metal. It must always be borne in mind that the $+$ or positive pole is connected with the $-$ or negative metal, and *vice versa*.

The battery which I recommend for use in the consulting room is one of 100 cells, fitted up on that modification of Daniels' plan which is called Muirhead's. It can be placed on the basement, and the wires brought up into the consulting room. In this way patients are not frightened by a show of batteries. Although this treatment is really rather pleasant *when properly applied*, patients always seem to expect a shock, and are much relieved when they find there is nothing of the kind.

EFFECT ON THE SKIN.

The action of the current on the skin varies according to its quantity, intensity, duration, and the resistance which it meets with. If a feeble current be kept up for some hours, destruction of the skin and subjacent textures will follow; if the current be more powerful, the effect is proportionately rapid. Remak states—and I have verified his statement again and again—that the positive pole relaxes the blood vessels, and reddens and depresses the skin, while the negative pole has a directly contrary effect.

To produce these effects, takes from two to five minutes with one of Stöhrer's hospital batteries of 30 cells. No pain whatever is produced, although if we pass an induced current we have pain together with muscular and vascular contraction. In using the constant current the skin must be moistened; in using the induced current it must be dry (in the latter case, if moistened, the current passes to the deeper structures). The cells of the hair roots are also affected, and if a current be applied to skin covered with hair, the latter becomes more or less erect.

MODE OF APPLICATION.

The mode of applying the constant current is as follows:—Two sponges, varying in size according to circumstances, but usually about three inches in diameter, are inserted in metal cups connected with the battery by means of wires covered with some insulating material. One is applied to the

diseased spot, the other to some part of the body which is healthy. Sometimes a wire brush is substituted for one of the sponges; and sometimes, but rarely, a metal button. It must be remembered that *a current which causes pain does more harm than good.*

As a last resource, and often a successful one, I galvanise the spine and the sympathetic nerves. I follow in this the advice given by Remak, who asserted that such a process modified in some unknown way the general nutritive processes of the body. This is done as follows: the spine, by placing one sponge at the top and the other at the bottom; the cervical sympathetic, by applying the negative pole to the superior ganglion in the stylomastoid fossa, below and behind the angle of the inferior maxilla, while the positive may be placed above the manubrium or on the seventh cervical vertebra. The application should not exceed one minute.

That many obscure symptoms vanish under this treatment is well known to those who have paid any attention to this remedy, and I can state from personal experience that many of the most obstinate skin affections, and more particularly the remnants of such affections, disappear under its use.

As a remedy in many cases of anæsthesia and hyperæsthesia of the skin, I presume no one would dispute the advantages which electricity has over all others. It must be remembered that I am not advocating the use of galvanism necessarily by itself. The ordinary remedies may often be used at the same time, and used with advantage. Some

may ask—"How then are we to distinguish the effects of galvanism from those of other remedies?" I reply;—"Easily if a patient has had various treatment under different medical men for years without benefit, and is then treated by this means (in conjunction with others) and recovers, and this case is followed by hundreds of a similar nature, I contend you have as good proof as any reasonable person can require."

NECESSARY PRECAUTIONS.

In the administration of the constant current there are many precautions to be observed. These are apparently trifling; but upon their due observance depends the success of the treatment and the comfort of the patient. Thus the current should always be tested by the operator upon himself, and he should invariably begin with a low power and gradually increase it. In this way a current otherwise unbearable will be readily tolerated. A feeble current used for a short time produces the greatest therapeutical effect; *one which is painful to bear does much harm*. I have repeated the last observation purposely on account of its importance.

Care must be taken that the metal cup in which the sponge is fixed does not touch the patient, or a sore place may be produced. Avoid placing the sponge over any bony prominence, as this causes pain. Apply the sponge in connection with the negative pole to the diseased, and the other to some healthy, part of the body: *e.g.*, suppose a patch of disease on the back of the hand, we cover it with the sponge connected with the negative pole, and

place the other anywhere on the forearm, arm, or even on the body itself. In treating cutaneous diseases, it is desirable to apply the current for about ten minutes, using as many cells as the patient can bear quite comfortably—that is at last. We must always *begin* with a few, as I said before.

In order to tell with certainty which is the negative pole, it is best to test a mixture of iodide of potassium and starch. Hydrogen is given off at the negative pole, and at the positive pole a deep blue colour is produced. It is well in practice to have each wire covered with a different coloured silk. Thus the negative may be red and the positive green. This often saves confusion, as in the hurry of practice a mistake might possibly be made.

DISEASES IN WHICH IT IS MOST USEFUL.

I now have to speak of special applications of Electricity to Skin Diseases. None are more troubling to both patient and physician than Leprosy and Chronic Eczema. We often succeed in these cases with caustics or blisters, but as often fail. In that case, let a sponge damp with a solution of Pot: Caustic, ʒj *ad.* ʒj or stronger, and connected with the negative pole, be laid on the part affected and the current passed with the precautions already laid down. Let this be done every other day, or even every day, until a decided effect is produced; after this the cure may be completed in the ordinary way. So marked is sometimes the success of this treatment, that, when the disease affects the whole body, I have once or twice drawn patterns on it

with the sponge, the places where it had been applied being white, the others a livid red colour.

Mrs. C. (*æt.* 72), literally covered with *Lepra Inveterata*, which she had had more than 30 years without intermission. No treatment had done any good. I tried her some time with ordinary remedies without avail. The current was applied for nearly four months, and she *was cured*. There was a slight stain where the disease had been, but nothing more.

Mr. B. (54) had suffered from *Eczema Siccum* on the back of both hands for 16 years. The same treatment was adopted as in the last case, with the same result at the end of two months, except that no trace of the disease was left.

I should say that in both cases arsenic was given in *very large* doses, reaching at times to *m.xxx.* three times a day.* At the same time they were most carefully dieted.

Tinea Favosa.—Two cases of this disease in the same family, which had resisted other treatment for four months, yielded in six weeks to the current. Whether it kills the parasite, or whether it produces a more healthy state of skin, so that there is no longer a suitable nidus for its growth, I am unable to say.

* NOTE.—I have found it necessary in some obstinate cases to increase the dose to this amount before an effect is produced on the system. Of course the patient must be most carefully watched whilst such large doses are administered.

Urticaria.—I have only had the opportunity of trying this remedy in one case, and the effect was most unsatisfactory; but, of some hundreds of cases of cutaneous disease, this is the only one in which any bad effect was produced, and that was but temporary.

Mary D., sempstress (*æt.* 19), had suffered from *Urticaria* for four years. It came out on the least excitement, or wherever she touched her skin with her finger nail. There was no cause that could be made out. No sooner was the current (from four cells) applied than her face went a fine lobster red, and long wheals came out all over her body; this was accompanied by the most frightful itching. This condition continued nearly all day, and was but slightly reduced by sedative lotions. She would not permit the battery to be used again, and ultimately recovered under the use of the sulphur fume bath continued every day for three months or thereabouts.

Mr. T. had suffered from three apparently melanotic tumours, the size of a small bean, for three years. Five years ago he had one similar, which was excised at the Infirmary. Two years after, these appeared near the site of the old one, *i.e.*, over the tendon of the extensor of the great toe. A needle was inserted into each tumour in connection with the negative pole, and the circuit completed by placing the sponge connected with the positive pole on the thigh. In two months these tumours had disappeared. Whether they will

return or not, of course I cannot say, as only eight months have elapsed since I removed them; the man is, however, in good health at the present time. At one time an unhealthy-looking ulcer appeared at the point of insertion of one of the needles, and a good deal of œdema supervened round the malleolus; but under ordinary treatment this healed, the œdema disappeared, and the cure stated was the result.

Vitiligo.—This is another troublesome complaint to cure. It seems to depend upon some abnormal condition of the blood vessels of the part, a deficiency either in number or in capacity. I have cured two or three cases by applying a metal brush over the spots, and passing the current as in the above cases. They are very obstinate, and take many months to cure; in fact, they are more troublesome to cure than they are worth, as they cause no inconvenience whatever.

Acne Rosacea.—This disease, commonly called copper-nose, and caused nine times out of ten by drinking, may be much relieved and sometimes cured by applying the negative sponge to the nose and the other elsewhere.

Mrs. B., a lady of some position, applied to me suffering from this complaint, caused by brandy tippling on the sly. She objected to galvanism, so that ordinary remedies were tried, but without effect. The current from six cells was passed every other day for about six weeks. At the end of this time she was cured.

Mr. T., a publican, came to me in much the same state as the above. He was entirely cured by similar treatment in three weeks.

Herpes Zoster (Shingles).—The distressing neuralgia which accompanies this complaint yields readily to a gentle current.

Tinea Decalvans, or general Baldness.—The last cases I will allude to are those in which there is either complete or partial baldness, with or without the loss of moustache, beard, whiskers, or even sometimes eyebrows. In the latter case, it is only by the greatest perseverance that a cure can be obtained; in the others much may be done. A gentle current carefully passed will stimulate the hair bulbs and the vessels of the skin, and thus promote the growth of the hair in a way which is often astonishing. Sulphur fume baths often help in restoring the functions of the skin. I could quote many cases from my case-book, but have not room.

In conclusion, I must remind inexperienced readers that Electricity is for “weal or woe” an agent second to none. While cramps, faintings, fits, etc. follow its use in uneducated hands, painless and even pleasing are the sensations produced when applied by a skilled physician.

TABLE showing the result of the Galvanic Treatment in 30 cases of Psoriasis at the Skin Hospital, Hyde Road, Manchester.

	Name.	Duration of Complaint.	Result.	Remarks.
1	Cox	9 months	cured	30 applications.
2	Taylor.....	3 years	"	50 "
3	Campbell.....	7 months	"	24 "
4	Fox	14 years	"	79 "
5	Allanson	6 weeks	"	22 "
6	Berry	1 month	"	30 "
7	Hall	3 years	"	28 "
8	Parry	9 years	much relieved	44 " This man was obliged to go abroad, or would have recovered entirely.
9	Ellis	1½ years	cured	14 applications.
10	Heathcotes ...	4 months	"	20 "
11	Price	16 months	"	24 "
12	Booth	4 years	"	37 " Very bad case.
13	Ashcroft	17 months	"	33 applications.
14	Rider	5 years	"	14 "
15	Wild	13 months	"	34 "
16	Benson	18 months	much relieved	22 " Attended very irregularly.
17	Jackson	4 years	cured	12 applications.
18	Morris.....	3 years	"	14 "
19	Edwards	2 years	"	16 "
20	Green	14 years	"	40 "
21	Allum	3 months	"	22 "
22	Duggan	7 months	"	20 "
23	Musgrave	2 years	"	24 "
24	Courvill	2 years	"	26 "
25	Petty	6 months	"	14 "
26	Hart	14 months	"	24 "
27	Gallagher	17 years	much relieved	104 " He got tired; had he persevered, I have little doubt he would have recovered.
28	Turner	6 months	cured	20 applications.
29	Truman	7 months	"	90 "
30	Bradley	12 months	"	84 "

Most of these cases had undergone all kinds of treatment before applying at the Skin Hospital. In very few were other remedies than the current used. They were all forbidden to take coffee, malt liquors, or spirits, wines (except claret), spices, and sugar (except in moderation). They were also told to prefer green vegetables to others.

Monthly Statement of Patients and Galvanic Applications at the
Skin Hospital, Hyde Road.

Months.	No. of Patients.	No. of Applications.
1871.		
October	24	540
November	32	600
December	34	572
1872.		
January	34	620
February	37	600
March.....	40	734
April	57	820
May	80	930
June	109	1,012
July	98	998
August	101	1,016
September	118	2,001
Total	764	10,443

CASES TREATED AT THE SKIN HOSPITAL, 1872.

Eczema	149	Schirrus	14
Impetigo	114	Epithelioma	1
Scabies	70	Encephaloid	3
Acne	50	Dermatitis	4
Psoriasis	141	Ozæna	3
Tinea	37	Erysipelas	4
Lichen	27	Onychia	4
Pityriasis	24	Fistula	4
Ecthyma	21	Arthritis	4
Erythema	22	Veruæ	6
Herpes	19	Hordeolum	4
Alopæcia	15	Glandular	14
Urticaria	11	Bursal	2
Lupus	18	Apthæ	4
Prurigo	9	Nodes	4
Pruritus	9	Gingivitis	3
Chloasma	20	Nævus	2
Ptoriasis	0	Gangrena	0
Sycosis	24	Varioloid	0
Furunculus	1	Mastitis	0
Rupia	4	Keratitis	0
Strophulus	5	Otorrhœa	2
Molluscum	1	Burns	1
Favus	4	Exostosis	1
Anthrax	1	Goitre	3
Purpura	1	Tumours—	
Intertrigo	1	Ranula	1
Pemphigus	1	Ganglion	2
Ulcers	123	Sebaceous	2
Abscesses	64	Polypus	2
Scrofula	84	Chilblains	1
Syphilis	70	Various	126
Icthyosis	0		
Scorbutus	0	Total (New cases) ...	1,361
Elephantiasis	0		
No. of operations			59
Attendances			6,353

EXPLANATIONS.

Caloric.—The cause of the sensation of heat.

Constant.—The difference between this term and “continuous” may be shown thus:—A man starts for a twenty-mile walk; he does the first part at the rate of four miles an hour, the second part at the rate of three miles, and so on, varying his pace to the end, but never stopping—his pace is continuous. If he did the whole distance at the same pace, whether quickly or slowly, his pace would be “constant.”

Continuous.—*Vide supra.*

Current.—A term applied for convenience, but merely signifying the continuous transmission of force.

Manubrium.—The upper piece of the sternum.

Negative.—To produce a galvanic current, two dissimilar substances are brought together and acted upon by an exciting fluid. The more oxidisable is called the positive, and from this the + or positive electricity starts, traverses the liquid, and reaches the — or minus plate. Thus the current travels from positive to negative *inside* the battery, and from negative to positive *outside* the battery.

Positive.—*Vide supra.*

Quantity.—Of electricity is obtained by acting upon extensive surfaces.

Intensity.—*i.e.* Power of overcoming resistance, or in other words, the quantity of electricity which circulates in a given space of time.

Tension.—*Vide* “Intensity.”

ADDENDUM.

IN a future edition of this pamphlet the Author intends to describe the treatment of cutaneous diseases by means of various kinds of baths, medicated and otherwise, as this subject has been much neglected by the profession.

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